

# Notice of Allowability

Application No.

09/978,058

Examiner

Dzung D Tran

Applicant(s)

TAKESHITA ET AL.

Art Unit

2633

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/17/2001.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 10/17/2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 02/27/2002
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
LESLIE PASCAL  
PRIMARY EXAMINER

**DETAILED ACTION****Allowable Subject Matter**

1. Claims 1-18 are allowed. The following is an examiner's statement of reasons for allowance: The prior art of records does not teach or suggest the limitations "a frequency detection circuit for fetching the first and second signals generated by said signal generation circuit in synchronism with the input signal for each period of the input signal, logically operating the fetched signals and signals having been fetched in the immediately preceding period and outputting, based on a result of the arithmetic operation, a first frequency control signal for raising the frequency of the oscillation frequency signal of said oscillator or a second frequency control signal for lowering the frequency of the oscillation frequency signal of said oscillator" in claims 1 and 13. The closest prior art, Miyashita et al. (US 5,889,828) discloses clock reproduction circuit and elements used in the same and Brown et al. (US 6,333,678) disclose a method and apparatus for agile phase noise filtering using phase locked loop, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Art Unit: 2633

### Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Keaveney et al. U.S. patent no. 6,556,086. Fractional N-synthesizer and method of synchronization of the output phase

b. Yoshie U.S. patent no. 6,353,358. Quadrature demodulation circuit with a pseudo locked state detection system


c. Tatsumi U.S. patent no. 5,727,019. Digital modem

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (571) 272-3025.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (571) 272-3022.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
LESLIE PASCAL  
PRIMARY EXAMINER